



SHARE 2023 ATLANTA

March 5-8, 2023

By Ed Webb

AGENDA

- Why Go to SHARE?
- Quotes of Interest
- Odds and Ends
- Best Sessions
- SHARE Status

Cover: Tarantula Nebula from James Webb Space Telescope
Here: Cartwheel Galaxy from James Webb Space Telescope
Courtesy of NASA



WHY GO TO SHARE?

- zI6 Single Frame and LinuxONE 4 Announced Today, April 4, 2023
 - IBM Provided Guidelines on z/OS Changes for New Hardware at SHARE
 - Single Frame and Rack-Mount options
- z/OS 3.1 Upgrade Planning and Look Ahead ([Preview Announcement](#))
- Late-breaking z/OS 2.5 and z/OS 2.4 News - 4Q2022 and 1Q2023 C.D. Functions
- Networking with peers and IBM developers and executives

WHY GO TO SHARE?

- **SHARE Requirements Carry More Weight with IBM than Ideas (were RFEs)**
- On SHARE site, use Vote for Submission to more easily view text of requirement
 - <https://www.share.org/Connect/Advocacy-Requirements-System>
- www.ibm.com/ideas z/OS direct link
- Submit tactical rather than strategic Ideas

WHY (DO I STILL) GO TO SHARE?

- Because I'm a Z Person who has attended these conferences since 1979; first GUIDE starting in 1979, then SHARE in 1999
- Networking with Friends and Vendors
- Staying Current and Being Re-energized about z/OS
- Only Third SHARE In-Person Since March 2020

SHARE 2023 ATLANTA

4 Days In-Person and Some Streaming with Recordings!

- Three Days of Full Content with 3 rooms live-streamed and recorded
 - Sunday had one-hour with concurrent Sessions of Public content
- SHARE Tech Exchange Sunday, Monday and Tuesday evenings with food
- Lunch (free) and Learn Sessions on Monday and Wednesday
- Broadcom-sponsored Lunch (free) on Tuesday
- Recorded sessions are available now (Ends May 31, 2023)
 - 45-50 minute sessions - video and audio with handouts in most cases
- SHARE Partners with dedicated sessions on Wednesday

QUOTES OF INTEREST

- “I think of PCs as Toys, mainframes as tools” - Jerry Spencer of DTS Software
- “IBM Z is a critical part of the Global Economy: 67 of the Fortune Top 100 companies, 45 of 50 top global banks, 8 of 10 top insurers, 24 of top 25 Countries (based on GDP)” - Matt Whitbourne of IBM

ODDS AND ENDS

- Curious about some new z/OS function? Then locate details here:
 - <https://www.ibm.com/support/pages/new-function-apars-zos-platform>
 - <https://www.ibm.com/support/z-content-solutions/management-services>



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SHARE New Orleans
AUGUST 13-18, 2023

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ABOUT

In-person and online events are a hallmark of SHARE, where plentiful learning and networking benefit the entire community.

ABOUT SHARE EVENTS

- Event Calendar
- Partner Opportunities

PAST EVENTS

- Proceedings

SHARE ATLANTA 2023

- Registration
- Schedule-at-a-Glance
- Technical Agenda
- Speakers
- Activities
- SHARE Atlanta FAQs

SHARE NEW ORLEANS 2023

- Call for Presentations

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EVENTS

PROCEEDINGS FILE LIBRARY

Access the archive of SHARE Proceedings to view content from past SHARE events, including past session presentations and handouts. The SHARE Proceedings library is a **SHARE membership benefit**, and you must be a **SHARE member** to view the full content.

Session recordings for past events are only available to those who registered for the event. Full event PDF proceedings are available to ALL SHARE members.

With enhanced search functionality, you can find the exact content you are looking for quickly and easily. Try the filters to drill down by the hot topic subject area of your interest across years of SHARE events. You can also use the search box to view the entire archive by the key search terms of your choosing. Click the "Tags:" underneath each header to take a deep dive into all content related to your interest.

search



Number of search result: **202**

FILTER BY:

ISPF Hints, Tips, and Recent Improvements

BEST SESSIONS

SHARE MVS Program Opening with Spotlight Speaker

The Future is Now: the Critical Role of Mainframe in Hybrid Infrastructures

By Jeff Henry, VP of Strategy and Design at Broadcom

- **New Value from Mainframes**

- Investing and growing in the Mainframe
- 2025 35 billion IoT devices feeding data back to IT infrastructure
- Bring on more data and higher transaction volumes for Mainframe processing
- 72% of worldwide transactions run on IBM Z at 8% of overall IT spend
- Mainframers make this happen

BEST SESSIONS

SHARE MVS Program Opening with Spotlight Speaker

- **New Value from Mainframes**
 - It's not about the box, it's bigger on the outside - hidden secret in the data center
 - Hybrid world - more value from your data, holistic Zero Trust Security, ...
 - Top performers (companies) have 32% Mainframe, 18% cloud, 51% distributed; 10% more than average for Mainframe, 10% more than average for Cloud, 20% less than average in distributed
 - Strategy: Embrace Open, Enhance Your Hybrid Cloud, Partner for Success

BEST SESSIONS

SHARE MVS Program Opening with Spotlight Speaker

- **Use Cases of Modernization in place for Value Creation**
 - DevOps - invest in apps to speed implementation of new features
 - Ensuring people are more efficient and Ops runs smoother
 - Zero-trust environment to ensure trusted modern experiences
 - MFA, privilege access, be sure Chief Security Officers know about Z
 - Extend the value of mission-critical data
 - Operate at highest levels of efficiency and reliability- be more data driven

BEST SESSIONS

SHARE MVS Program Opening with Spotlight Speaker

- **Challenges:**
 - More Awareness Inside and Outside of I.T.
 - Essential to improve self-service and reduce mean-time to resolution
 - End-to-end awareness, correlation across domains, reduce knowledge loss
 - Proactive
 - Reduce complexity and noise

BEST SESSIONS

SHARE MVS Program Opening with Spotlight Speaker

- **Actions to Perform Now**
 - Use Machine Learning anomaly detection
 - Flexible Mainframe data storage - store anywhere, protect against ransomware, reduce batch processing, save millions....
 - Partnerships are powerful for your digital journey
 - Build new Mainframers, planning and workshopping, educating leadership, licensing, optimizing software

BEST SESSIONS

MVS Core Technologies Project Opening

- **Mainframes and the Moon**
 - The Role Played by IBM Mainframes in the Greatest Technical Achievement in the History of Mankind
 - By Mark Nelson, CISSP®, CSSLP®
z/OS® Security Server (RACF®) Design and Development IBM®
Poughkeepsie markan@us.ibm.com
 - NASA Apollo Project to land humans on the moon

RTCC: Project Apollo

- Transitioned from the five IBM 7094s to five IBM System/360 Model 75Js which were responsible for:
 - Launch systems
 - Management of telemetry data
 - Orbit computation and trajectory determination
 - Mission planning
 - Reentry
- NASA contractors Rockwell and Caterpillar work with IBM to create what is now called IMS to help track the millions of parts needed for the Apollo rockets and spacecraft
- The Apollo Real-Time Operating System (RTOS), a modified version of OS/360 becomes the single operating system to support all Apollo activities

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RTOS Extensions to OS/360

- Creation of a new task dispatcher and the concept of tasks which are independent of their creator, run with their own PSW key, and wait for work, which can be queued
- Support for a synchronized high resolution (10 micro second) clock and interval timer
- Real-time I/O control system for devices supporting a device-independent display format language
- Support for IBM 2361 Large Core Storage (4M of additional storage)
- Fast swap-over (10 seconds) to backup
- Houston Automatic Spooling Priority (HASP) system to control job input and output

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Space Shuttle and IBM Z

- The Space Shuttle program made extensive use of z/OS (IMS, JES3, PL/I, HL Assembler, C++, RACF), z/VM, and Linux on Z (Redhat)
- z/OS was used for mission planning, flight software creation, testing, simulation, and loading and validating software onto the orbiter
- Onboard computing was performed by the IBM-supplied AP-101S General Purpose Computer (GPC)
- Also used on several military aircraft (B-1, B-52, F-15)
- Evolved from the S/360 architecture
- See “Space Shuttle Usage of z/OS” (Jan Green, United Space Alliance), SHARE, 14 August 2007, session 8121

<https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20090001334.pdf>

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BEST SESSIONS

Digital Signatures for z/OS Software Packages

By Kurt Quackenbush, IBM z/OSMF Software Management and SMP/E

- Digital Signature support already delivered in recent PTFs
- SMP/E GIMZIP creates portable packages of ready to install SMP/E consumables, or already installed software.
- Extended GIMZIP to digitally sign packages
- SMP/E and z/OSMF are extended to verify packages signatures
- Signature is hashed data that is then encrypted with public/private key
- Digital certificate is certified by trusted authority and contains identity info and the public key

BEST SESSIONS

Digital Signatures for z/OS Software Packages

- In the GIMZIP package is a new file GIMPAF2.XML
- SMP/E does not require signature verification for a signed GIMZIP package (yet)
- Providers can start signing packages whether or not consumers are verifying the signature
- Signing certificate comes with GIMZIP package from provider
- SMP/E verification uses Java services
- RACF provides the IBM CA Root “STG Code Signing CA-G2” automatically
 - But marked Not Trusted
- READ Access to LISTRING Profile in FACILITY Class is good enough, but a provider may need RDATA LIB Class active

BEST SESSIONS

What's New in z/OS:The Big Peach Edition

By Gary Puchkoff of IBM

- z/OS 3.1 themes are AI-Infusion, modernization and simplification, security and resiliency
- z/OS 3.1 is not supported on z13
- z/OS 3.1 requires Java 11, Java 8 still works on 3.1 but z/OS needs Java 11
 - Java 17 SOD
 - 25 years of Java on z/OS
- SCA (Security Configuration Assistant) line mode support can be used before z/OSMF starts first time
- Portable Software Instance being signed with intro of 3.1

BEST SESSIONS

What's New in z/OS:The Big Peach Edition

- z/OS memory limit raised to 16TB
- RMF
 - New browser-based UI for monitor III and reports
 - New DDS with 64-bit support
- z/OSMF UI for SDSF being updated as well
- z/OS Change Tracker (priced)
 - 90-day self-service trial
 - z/OSMF plug-in

z/OS 3.1 Release Overview – z/OS support summary

Release	z10 EC z10 BC WdfM	z196 Z114 WdfM	zEC12 zBC12 WdfM	z13 Z13s WdfM	z14 ZR1 WdfM	z15	z16	End of Service	Extended Defect Support
z/OS V2.2	X	X	X	X	X	X	X	9/20	9/23 ²
z/OS V2.3			X	X	X	X	X	9/22	9/25 ²
z/OS V2.4			X	X	X	X	X	9/24 ¹	9/27 ²
z/OS V2.5				X	X	X	X	9/26 ¹	9/29 ²
z/OS 3.1					X	X	X	9/28 ¹	9/31 ²

Notes:

- ¹ - All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.
- ² - Extended support dates are projected and are subject to change or withdrawal without notice.

WdfM - Server has been withdrawn from Marketing

Legend

Defect support provided with IBM Software Support Services for z/OS
Generally supported

BEST SESSIONS

What's New in z/OS:The Big Peach Edition

- z/OS Education Assistant for z/OS 2.5 materials at z/OS github:
 - <https://github.com/IBM/IBM-Z-zOS/tree/main/zOS-Education/zOS-V2.5-Education>
- z/OS Requirements (RFEs) are now Ideas based on AHA platform:
 - <https://ideas.ibm.com>
- Here's the Link to User Requirements satisfied by z/OS 2.5:
 - <https://www-01.ibm.com/servers/resourcelink/svc00100.nsf/pages/zosv2r5-user-req?OpenDocument>
- Use SHARE requirements to submit requirements
 - <https://www.share.org/Connect/Advocacy-Requirements-System>

BEST SESSIONS

z/OSMF Workflows for the Baffled Sysprog

By Jerry Spencer and Steve Pryor, DTS Software, LLC

- Jerry S. started in applications in 1975, became a Sysprog in 1978
- **Welcome to z/OSMF**
 - Automate common tasks
 - Standardizing process
 - Possible uses: provisioning, QA, installations/file transfer
 - “Create a workflow” but no way to start creating a workflow “in common meaning”

BEST SESSIONS

z/OSMF Workflows for the Baffled Sysprog

Don't Despair, There is help

- [One Stop Hub](#)
- Join [IBM Z Communities](#) to communicate with kindred spirits or lost souls
- z/OSMF Guild [home page](#)
 - Archived presentations back into 2021

BEST SESSIONS

HMC 2.16 Features on z16 Including Remote Code Load

by Brian Valentine, IBM

HMC 2.16 can be loaded on z16 or z15 or any standalone HMC

- Tech service program (TSP415) will update standalone or z15 HMA to 2.16 code

HMC Dashboard Replaces Home Screen

- Resource links
- Widget dashboards >>HMC>Dashboard>Widgets>What's New
- >Widgets>Systems Health
- >Widgets>Frequently used tasks

BEST SESSIONS

HMC 2.16 Features on z16 Including Remote Code Load

Hardware Management Appliance

- HMC and SE in one server with redundant server
- New z16 means new HMC function must be ordered as HMA
 - Existing standalone HMC still supported
- zNext processors will not support standalone HMC

SOD (Statement of Direction) of Firmware Update Process

- Remote Code Load (RCL)
- Z16 is last IBM onsite code load without additional support contract \$\$\$

YouTube videos about how to use HMC features and functions

BEST SESSIONS

ISPF Recent and Upcoming Changes

By Sam Reynolds, IBM RTP

Changes in ISPF 3.1 available

- Externalize HILITE values to IBM z variables
 - Tom Conley's CUCI (kooky) on CBT tape satisfies many IBM RFEs
 - CUCI needed programatic way to determine HILITE settings
 - APAR OA62409 for 2.4 and 2.5 (RFE 145682)

BEST SESSIONS

ISPF Recent and Upcoming Changes

Changes in ISPF 3.1 available

- ISPF enhancements for pervasive encryption
 - Pre-3.1, no support for pervasive encryption
 - Could only be allocated via TSO command or by using JCL
 - Now “keylabel” field added to ALLOCATE panel (option 3.2) or in Define Cluster panel
- ALLOCATE succeeds whether encryption worked or not so ISPF message “keylabel ignored”

BEST SESSIONS

ISPF Recent and Upcoming Changes

Changes in ISPF 3.1 available

- Case-Insensitive Sort for ISPF UNIX directory list
 - UDLIST similar to ISHELL except could not use caseless sort
 - ZOS-I-1298 Idea implemented case-insensitive sort
 - UDLIST Option to make CIS option default
 - SORT caseless option
- PDSE V2 member generation enhancements
- SCLM is still supported but not being enhanced

BEST SESSIONS

JES2 Product Update

By Tom Wasik, IBM JES Architect

- OA62796 JOBS REST Interface
 - Additional statuses via notifications
 - Ready, Active, Complete
- Enhanced RESTJOBS API - see z/OSMF Job document
- OA61229 CKPT versions in 64-bit storage

BEST SESSIONS

JES2 Product Update

OA61231 JOBS REST interface

- Removes dependency on CEA/CIM for Job Completion notification
- Same JSON document generated now by JES2 instead of CEA
- Original ENF78 still issued by JES2 - ENF has indicator that shows JES2 issued HTTP POST notification rather than CEA/CIM
- SYS_JOB_NOTIFY symbol moved earlier in INTRDR processing
- EDS (email delivery system) JES2EDS
 - Includes support for multiple TCP/IP stacks
- \$T JOBDEF,HTTP_NOTIFY=ENABLED to prevent CIM sending similar messages
- AT-TLS policy must be configured for notification to be used
 - Same policy as CIM supported

BEST SESSIONS

JES2 Product Update

Policy updates

- **Policies** were introduced in JES2 V2R4 to reduce or replace JES2 Exits
 - **New V3R1 policies not being rolled back to earlier JES2 releases**
 - **JobInput** Policy applies at end of input phase Right before exits 20/50 are called
 - **JobCreate** applies very early in life of JOB after JCL scan and before job resources are created
- **Variables**
 - can be passed between policies, extract system symbols and JES symbols
 - name, type, scope, policyVersion2
 - scope can be local or instance
 - Action, variable, value to assign a value to a variable
 - Variable can be prefixed by \$ to make unique

BEST SESSIONS

JES2 Product Update

Policy updates

- **Built-in functions**

- JESSymbol(symbol-name) to get info from JES2 symbols
 - Can be used by JOBInput policy
- SysSymbolSub(string) to allow use of System Symbols
- FailJob(option) determines how job should fail
 - Use in JobInput and JobCreate type policies

- **New JOB attributes that can be queried**

- See JES2 Installation Exits book

BEST SESSIONS

JES2 Product Update

Restricting JES Cancel Job

- New JOB attribute that can restrict JES CANCEL command (\$C or \$C,P)
 - JESCANCEL=ALLOWED | RESTRICTED
 - Only JES CANCEL, not z/OS CANCEL command
 - \$T J|S|T|JQ(xxx),JESCANCEL=xxx default is ALLOWED
 - \$T JOBCCLASS(xxx),JESCANCEL= MAS-wide, persists over warmstarts
 - Pre-execution policies can set CANCELRESTRICT true

3.1 Upgrade and Coexistence considerations

- Compatibility APAR OA61751 to tolerate new function and recommended for fallback to 2.4 and 2.5

Service Updates

- JOBDEF INTERPRET=JES is becoming more important so start using it soon
- OA60777 adds HAM CTRACE - very important to problem diagnosis

BEST SESSIONS

Bit Bucket x'4I'

Jerry Edgington

- DDVIPA is Distributed VIPA, has to be DVIPA or VIPA

Mike Shorkend

- Jobs fill up inits on one member of sysplex before using idle ones on another member

Ed Webb as Ed Jaffe:

- Colorful Console Language
 - MSys for Operations introduced in z/OS 1.2 (2001)
 - One of its most notable innovations was a new appearance for MCS consoles that provided greatly improved message heuristics by taking full advantage of 3270 Extended Data Stream and programmable color attributes
- Now z/OSMF Console function can do the same!

SESSIONS OF INTEREST

See Notes on [SPARTA Website](#)

- **Deep Dive into AI on IBM zSystems...**
 - By Elpida Tzortzatos, IBM
 - ZI6 Integrated Accelerator for AI
 - 3.5 million transactions per second
 - Up to 19x higher throughput and 20x lower response time
 - AI is on-chip. 7 watts versus than x86 Nvidia GPU of 300watts
- **IBM z/OS Security Server - RACF update Spring 2023**
 - By Mark Nelson, IBM
 - z/OS V3R1
 - Custom field in ACEE

SESSIONS OF INTEREST

See Notes on [SPARTA Website](#)

- **Watson & Walker zRoadshow Winter 2023 Edition**

By Frank Kyne, Watson & Walker

RMF CF Optimizations Enhancements

- New 2.5 CF Optimization option - turn it on (off by default)

CPENABLE considerations

- CPs enabled to handle I/O interrupts
- ZI4 and later set to 5,15 (was 10,30)

Erase-on-Scratch (EoS) and Related Topics

- SSDs work differently - writes a blank page, other concerns
 - OA61492 adds UNMAP to mark pages as invalid to remove actual writes

STATUS OF SHARE

- **SHARE 2023 Atlanta introduced 2 Changes:**
 - **SHARE Individual Membership (New!)**
 - \$149 Annual Fee Now, \$199 starting January 2024
 - Affiliate Membership at \$99 may still be available
 - **SHARE Changes for Program and Projects**
 - They are now called Focus Areas and Tracks
 - Probably some additional impact at Future SHAREs

STATUS OF SHARE

- SHARE 2023 New Orleans will be a full five-day conference August 13-18 at the Hyatt Regency.
- [Call for Presentations](#) is Open Now and Ends on April 21, 2023
- Registration opens in late April 2023
- SHARE was scheduled to occur in New Orleans in Spring 2006 but Hurricane Katrina in August 2005 derailed those plans. Looking forward to eating some good cajun cookin'.
- Visit SHARE's [Event Calendar](#) for more details soon.



SHARE® is an independent volunteer-run information technology association that provides education, professional networking and industry influence for the enterprise IT community.

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Online forums, a member directory and volunteer opportunities are but a few of the channels available for SHARE members to connect with peers and industry experts.

VOLUNTEER

- About SHARE Volunteers
- Open Volunteer Positions
- Volunteer Recognition

MEMBERSHIP

- Benefits
- Join Now
- Member Directory
- User Profile

COMMUNITIES

RECOGNITION

- Awards
- In Memoriam

SHARE PROGRAMS

- Application Architecture Development Integration Program
- Enterprise Data Center Program
- Enterprise-wide Program
- Information Management Program
- Linux and VM Program
- MVS Program
- Women in IT
- zNextGen

ADVOCACY & REQUIREMENTS SYSTEM



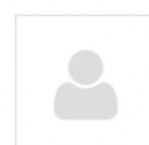
SHARE

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SHARE Communities

SHARE online communities provide members and volunteers a place to connect over specific hot topics and ongoing volunteer programs and projects. The online communities offer discussion forums to engage on the latest enterprise IT trends, solutions to your technology issues and file sharing. To access the communities you are a part of login. If you are interested in joining a volunteer community. [Please fill out the form here.](#)

Latest Discussions



zSecure Error trying to run Reports in Batch - File ...

By: **David Astemborski** , 25 days ago

Posted in: **Security and Compliance (SEC) Open Community**

Upcoming Events

SHARE Columbus 2022

Aug 21, 08:00 - 17:00 (CT)

QUESTIONS?

- Next SHARE is in New Orleans, Louisiana on August 13-18, 2023